

as a reliable representative of the supposed type" (p. 37). "We may conclude that systematic species, as they are accepted nowadays, are as a rule compound groups" (p. 38). These quotations can hardly be interpreted as an insistence upon the dictionary definition of a systematic species.

Anyone who holds that the term species cannot be given a definition acceptable to all systematists has returned to a "mediæval" type of reasoning (p. 362), and taxonomists may now choose from arropic, ropic, subsexual, semisexual, sexual, supersexual, symbasic, porric, stenic, linic, and clonic species (p. 389 *et seq.*).

Typographical errors are rare, but on p. 234 it seems that "*intraspective*" should be read "*intraspecific*."

The lack of qualitative variations in such species as, *e. g.*, *Liriodendron Tulipifera*, or in species of the diatoms, which have persisted unchanged through many geological epochs, and the coexistence of closely related species without isolation, environmental or physiological, are some of the problems which seem more difficult of solution on the basis of "kinetic evolution" than otherwise.

Emphasis upon the idea of kinetic variation in organic evolution is a distinct service, and the idea is of increasing interest in the light of the recent revelations of physical chemistry, pointing strongly to the evolution of the chemical elements by spontaneous transformations, that is, by a kinetic inorganic evolution. The volume, however, does not refer to this closely related phenomenon, and kinesis is discussed only with reference to the realm of the organic.

C. STUART GAGER.

## PROCEEDINGS OF THE CLUB

MAY 29, 1907.

The Club met at the museum building of the New York Botanical Garden at 3:30 o'clock, with an attendance of twenty.

Dr. John Hendley Barnhart was called to the chair.

After the reading and approval of the minutes of the meeting of May 14th, the following scientific program was presented :

“*The Linnaean and other early-known species of Crataegus*,”  
by Mr. W. W. Eggleston.

The earliest record found of American *Crataegi* is by Caspar Bauhin, in 1623. It is as follows :

“*Mespilus virginiana colore rutilo. Mespilus, qui colore est rutilo ut cerasa & valde dulcis*, part I, Ind. occid.”

The latter part of this quotation probably refers to the *Historia Medicinal*, by Monardes, published in 1569.

Lists of plants raised in the botanical garden at Leiden, published by Hermann in 1687, by Boerhaave in 1720, and by Royen in 1740, and in the *Schola Botanica* published at Paris in 1687, as well as Linnaeus's own lists (*Hort. Cliffortianus* and *Hort. Upsaliensis*), give short references to American *Crataegi* ; but it is to the English botanist Plukenet that we owe our first real knowledge of American thorns. His plates and descriptions are referred to by Linnaeus, and these, with his references, are invaluable to us.

Contemporary with Plukenet was Ray, who also added somewhat to our knowledge. John Banister of Jamestown or Williamsburg, Va., must have contributed much to Plukenet's knowledge, as he was the first English botanist to live in Virginia, and as he sent many seeds and specimens to England.

This Chesapeake Bay region produced all of the Linnaean species, except the one that has been referred to as *C. tomentosa*. This might have been brought from farther back in the country, perhaps by the Indians, as it was one of the earliest thorns raised in England, and is not found in the coastal plain.

In Plukenet's *Phytographia*, published in 1591, are five figures of American *Crataegi* ; Plukenet says that he saw the species illustrated in his plate 46, fig. 1, in the garden of the Hon. Charles Howard in Surrey. This specimen Linnaeus refers to *Crataegus Crus-galli*. A colored plate of it is published in the “*List of Plants raised for sale by the English Gardeners about London*” (*Hort. Brit.*), published in 1730. This is the plant labelled in the Linnaean herbarium as *C. tomentosa*. About this Miller was undoubtedly right, for Plukenet's description will cover no other American thorn, certainly none other that was raised in England at that time.

Plukenet's fig. 2, plate 46, undoubtedly refers to *C. Phaenopyrum* (Linn. f.). There is a good plate of this in Hort. Brit. Linnaeus referred this plate to *Crataegus coccinea*, and it has long been incorrectly referred to as *C. cordata* (Miller).

Plukenet's fig. 4, plate 46, is the first figure referred by Linnaeus to *Crataegus coccinea*. This figure and description require a smooth thorn with broad, slightly lobed leaves, and a red, two-seeded fruit. The only known American thorn that fits this description is *C. Margaretta* Ashe (= *C. Brownii* Britton). This was not known from the coastal-plain region, but there is a specimen in the U. S. National Museum from Maryland. Fig. 5, of plate 99, is a young shoot of *Crataegus Crus-galli* L.

Plate 100, fig. 1, was referred by Linnaeus to *Crataegus tomentosa*. This is the same as *Crataegus uniflora* Muench., or *C. parvifolia* Aiton. It is a common coastal-plain species, which both Banister and Clayton must have collected in Virginia. Clayton mentions but one species with leaves hairy on the lower side, and the reference is doubtless to this species.

That Linnaeus did not know well the thorns he was describing is partially proved by his referring *C. Phaenopyrum*, a five-seeded species, to a two-seeded species. Miller's description of the *Crataegi* raised in England is invaluable to us in tracing out these Linnaean species. As Miller says, Linnaeus was doubtless misled by Kalm.

*Crataegus viridis* L. was collected and probably described by Clayton. About this species there can be no question for there is a Clayton specimen of *C. viridis* in the British Museum.

A colored plate was made by Ehret for *Plantae Selectae* between 1750 and 1762. This may be the first illustration of *Crataegus flava* Aiton. It certainly belongs to the *flavae*, and was raised from seed sent from Carolina by Catesby in 1724. Another American thorn, *C. punctata*, was illustrated by Jacquin in Hort. Vind. 1770.

"Further Remarks on the Botanical Exploration of the Bahamas," by Dr. N. L. Britton :

Referring to a previous communication made to the Club and to others, printed in the *Journal of the New York Botanical Gar-*

den, Dr. Britton gave an account of the recent expeditions of Mr. L. J. K. Brace to Crooked Island, Acklin's Island, Long Cay (Fortune Island), and Andros, and of his own trip in February and March, in company with Dr. C. F. Millspaugh, to Eleuthera, Little San Salvador, Cat Island, Conception Island, Watling's Island, and Long Island. During the progress of this trip, Mrs. Britton explored the northern part of Eleuthera and did some collecting on New Providence. The greater portion of the archipelago has now been visited through the coöperation of the Field Museum of Natural History with the New York Botanical Garden, but the extreme southeastern islands, including Atwood Cay (Samana), Mariguana, and the Caicos Islands are as yet botanically unknown, and the central portion of the large island of Andros is a *terra incognita*. The small islands on the Cay Sal bank also remain unvisited. Dr. Britton exhibited specimens of many of the characteristic species and remarked on their distribution.

The Club adjourned until October 8, 1907.

C. STUART GAGER,  
*Secretary.*

#### NEWS ITEMS

Professor Charles E. Bessey will again be acting chancellor of the University of Nebraska for the four months this summer and autumn during which Chancellor E. Benjamin Andrews will be on leave of absence in Europe.

Professor William Trelease, who has held the chair of botany in Washington University at St. Louis since 1885, was among those who received the degree of LL.D. at the recent commencement commemorating the fiftieth anniversary of the founding of that university.

It is stated in the *Botanical Gazette* that Dr. A. F. Blakeslee of Harvard University has been elected professor of botany in the Connecticut Agricultural College at Storrs, and that he will begin his duties the present year by acting as director of the summer school.

Mr. Charles Louis Pollard, recently botanical editor for the G.